

## **Abstract**

### **Thermal electromagnetic radiation detector with alveolate structure**

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An absorbent membrane (1) is fixed in suspension onto a front face of a substrate (2), in a direction substantially parallel to the substrate (2), by at least one alveolate structure thermally insulating the membrane from the substrate (2) and arranged in a plane substantially perpendicular to the substrate (2). The detector can comprise arms (3) fixedly secured to the absorbent membrane (1). The alveolate structures can be respectively arranged between one of the arms (3) and the substrate (2). The alveolate structure can be formed by a plurality of superposed thin layers (6) separated by spacers (7) or by superposed rows of arcades formed by thin layers. The alveolate structure can comprise a porous pad.

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(Figure 3)